
"WHAT A GLORIOUS MORNING FOR AMERICA!"
1775
1642
CAMBRIDGE FARMS
1713
LEXINGTON
APRIL 19TH
LEXINGTON

Board of Selectmen Meeting *of April 18, 2007*
Public Works Facility Presentation

MEETING AGENDA

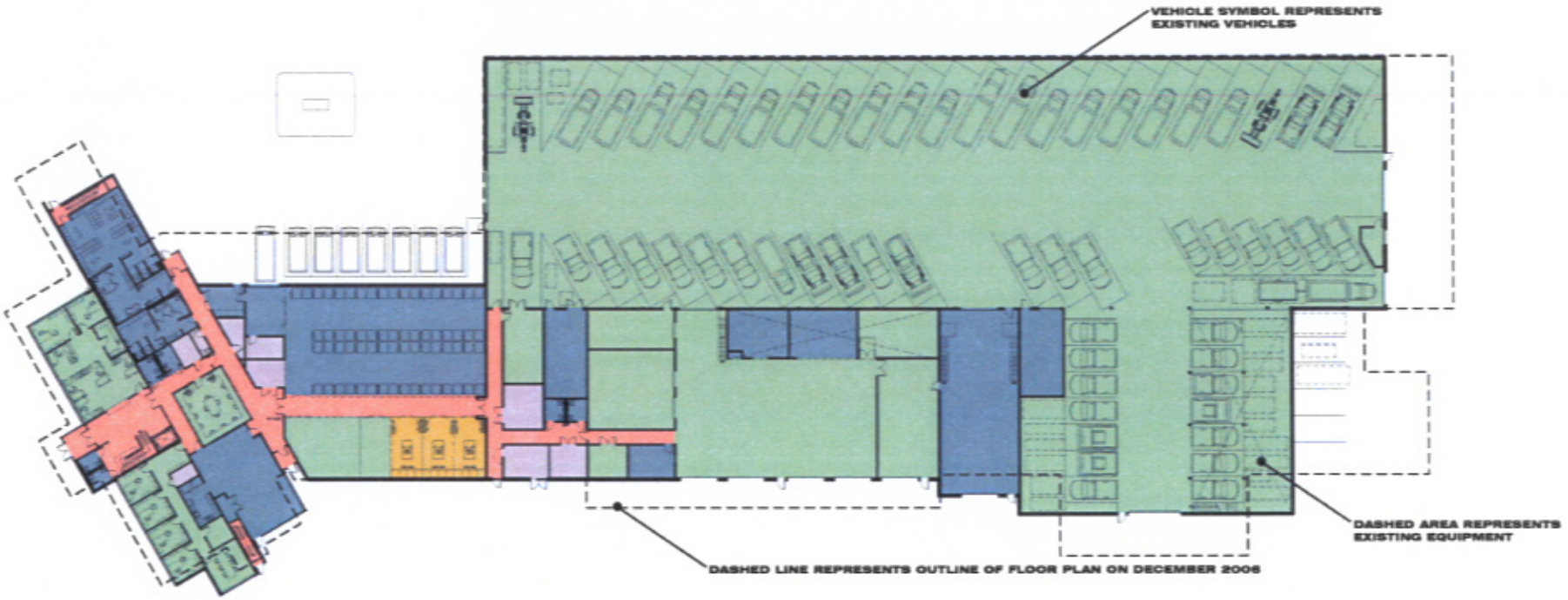
- Project Update
- Proposed Current Facility Design
- Energy & Sustainable Design
- Project Cost Estimate

Project Update – Overview of Due Diligence Period

- Met and outlined goals
- Developed strategy to assess Town needs
- Reviewed program in detail and tightened up the overall plan
  - Reduced number of vehicles garaged from 66 to 59.
  - Tightened up vehicle operations center layout
  - Reduced bay length in vehicle maintenance
  - Simplified cold storage thereby reducing retaining walls
  - Reconfigured central storage area
  - Town network room relocation not to be included in this project
  - Reduced size of conference + voting area
- Sign-off of revised facility program and plan by users and Town Management: January 22, 2007

Proposed Site

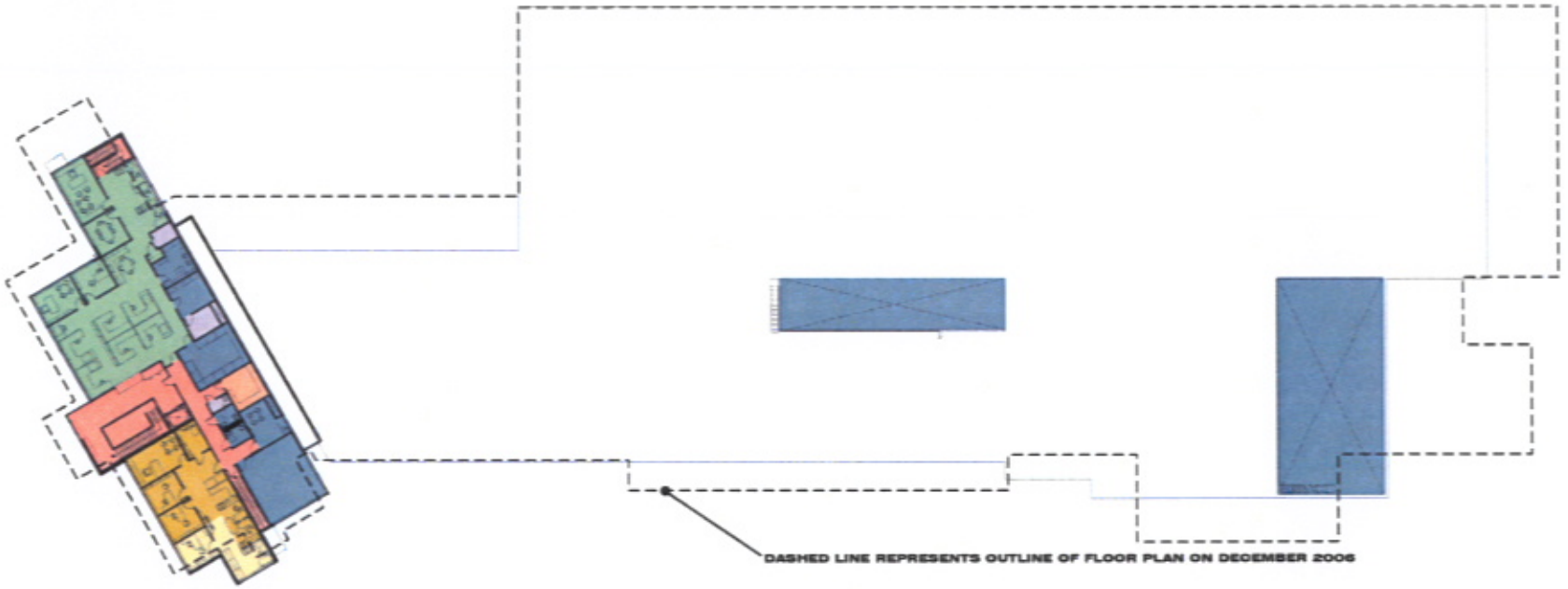
Proposed First Floor Plan



FLOOR PLAN COMPARISON	DEC. 2006	CURRENT PLANS
ADMINISTRATION	17,649 GSF	16,184 GSF
CENTRAL STORAGE & SHOPS	12,310 GSF	9,657 GSF
MAINTENANCE & SHOPS	10,299 GSF	8,870 GSF
VEHICLE STAGING/PREP AREA	45,443 GSF	41,010 GSF
WASH BAY	2,703 GSF	2,796 GSF
MEZZANINES	6,379 GSF	4,337 GSF
COLD STORAGE	6,100 GSF	4,203 GSF
TOTAL	100,883 GSF	87,057 GSF
FOOTPRINT	80,796 GSF	70,721 GSF

- DPW FACILITY
- SCHOOL MAINT.
- SHARED SPACES
- CIRCULATION
- BUILDING SYSTEMS
- MISC. SPACES
- BUILDING PROJECT MANAGEMENT TEAM

Proposed Second Floor Plan



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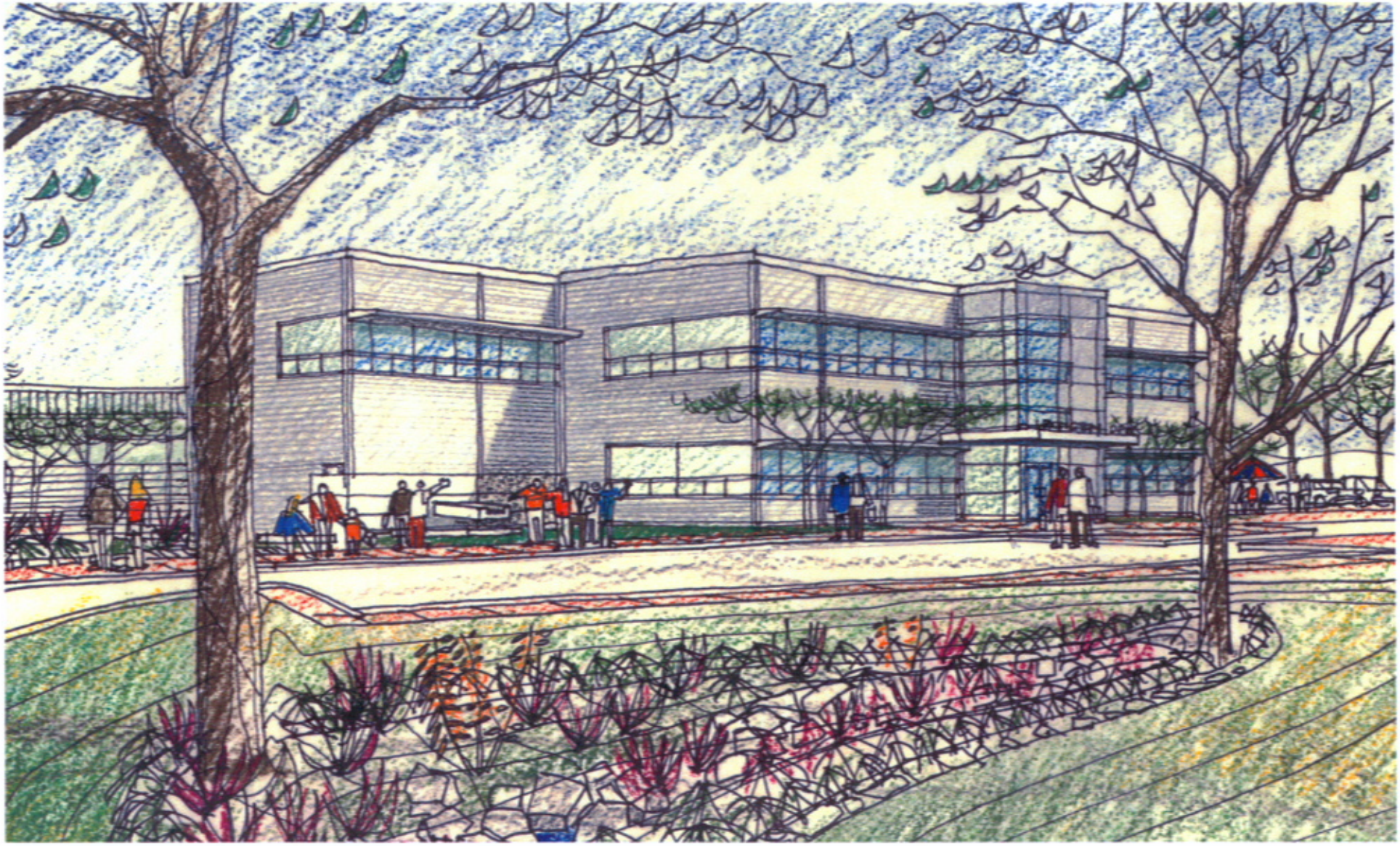
Proposed Bedford Street Elevation



Energy & Sustainable Design

- Proposed design will reach LEED (Leadership in Energy & Environmental Design) silver status as directed by the Town
  - LEED is a dynamic and ever changing benchmarking tool used to define and measure projects to qualify as "green" or "sustainable"
  - In the US only 5% of all new buildings are LEED certified, and in Massachusetts there are only 105 LEED Certified Buildings
  - LEED statistics show the average reduction in a building's energy use is 30%, its average carbon reduction is 35%, while the reduced water use is 30-50% and waste cost reduction is 50-90%
  - LEED buildings increase employee productivity and create healthier work environments.

Energy & Sustainable Design

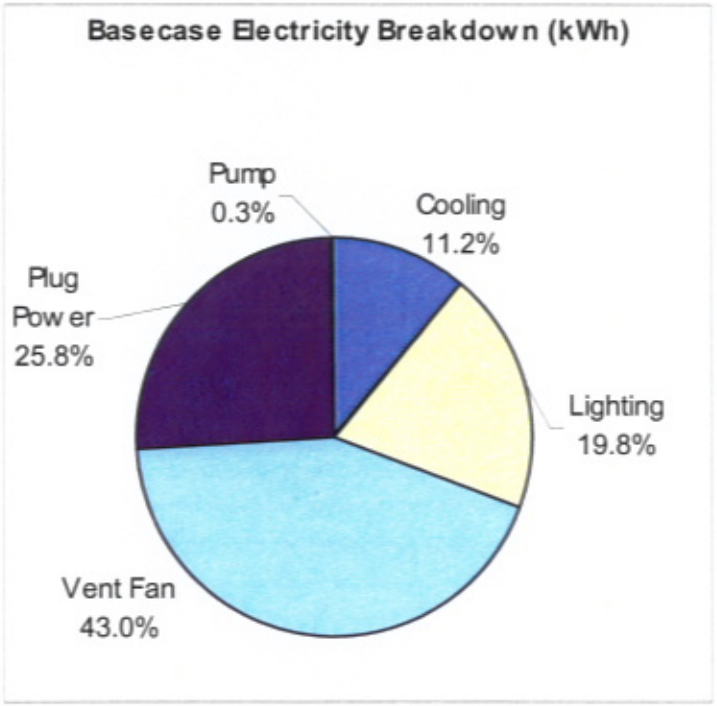
- In keeping with LEED goals, energy consumption has been a major focus of this project utilizing energy modeling as a tool to create a more energy efficient facility.
- Sebesta Blomberg & Associates is the independent Commissioning agent for the project and has completed the energy models using DOE 2.1 software.
  - The current model outlines an annual energy cost of $117,579 with potential alternatives to reduce the cost further.
  - The annual energy cost is a reduction from the previous energy model performed on January 22, 2007 by almost $11,000.
  - The major factors for this reduction are an increase in the wall and roof insulation, exterior and interior shading devices, and energy recovery functions to the roof top units.

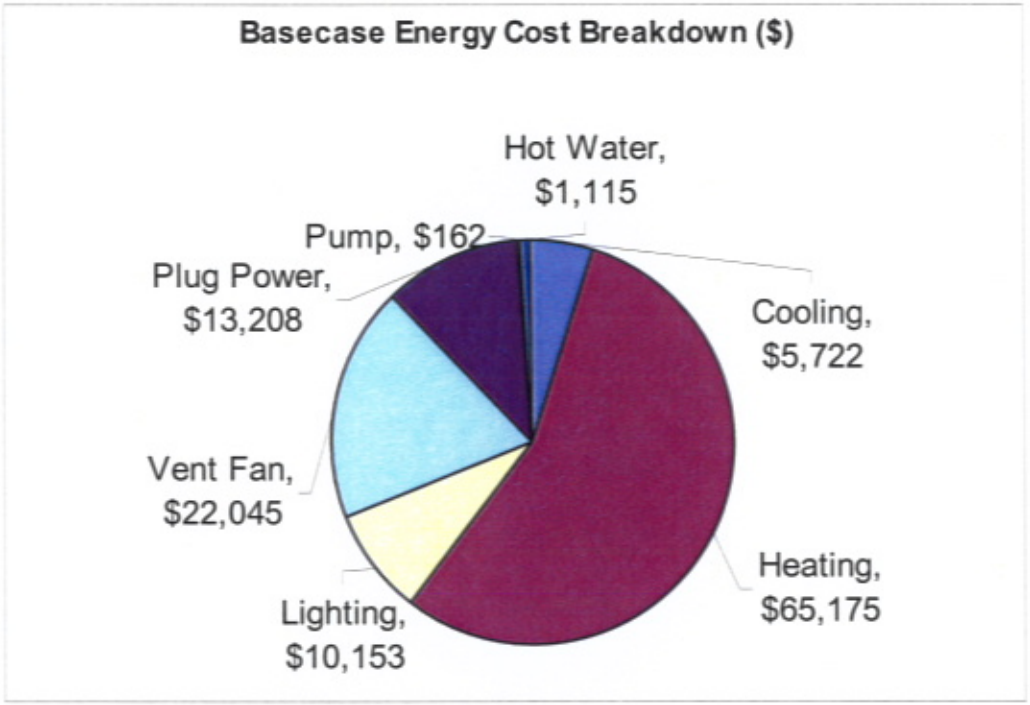
Energy & Sustainable Design

- The energy model findings are outlined in the below table and the chart on the following page.

Category	Strategy Level	Electricity kWh	Natural Gas Therm	Energy Cost $	Incremental $
Base Case - reflects recent	cost estimate	301,700	44,193	$117,579	
Alternatives					
Alt 1: Increase Wall Insulation	Operations: R-21.7	301,828	43,224	$116,147	-$1,432
Alt 2: Increase Wall and Roof Insulation	Operations Walls R-21.7, Roofs R-31	301,828	42,971	$115,768	-$1,811
Alt 3: Code Minimum Insulation	All Walls R-7, Roofs R-19	304,126	49,591	$126,088	$8,509
Alt 4: Increase Floor Insulation	All Floors R-34	301,203	42,832	$115,453	-$2,126
Alt 5: Waste Oil Heater*	Supplemental heat in vehicle staging / prep	301,700	41,393	$113,379	-$4,200

Energy & Sustainable Design Update



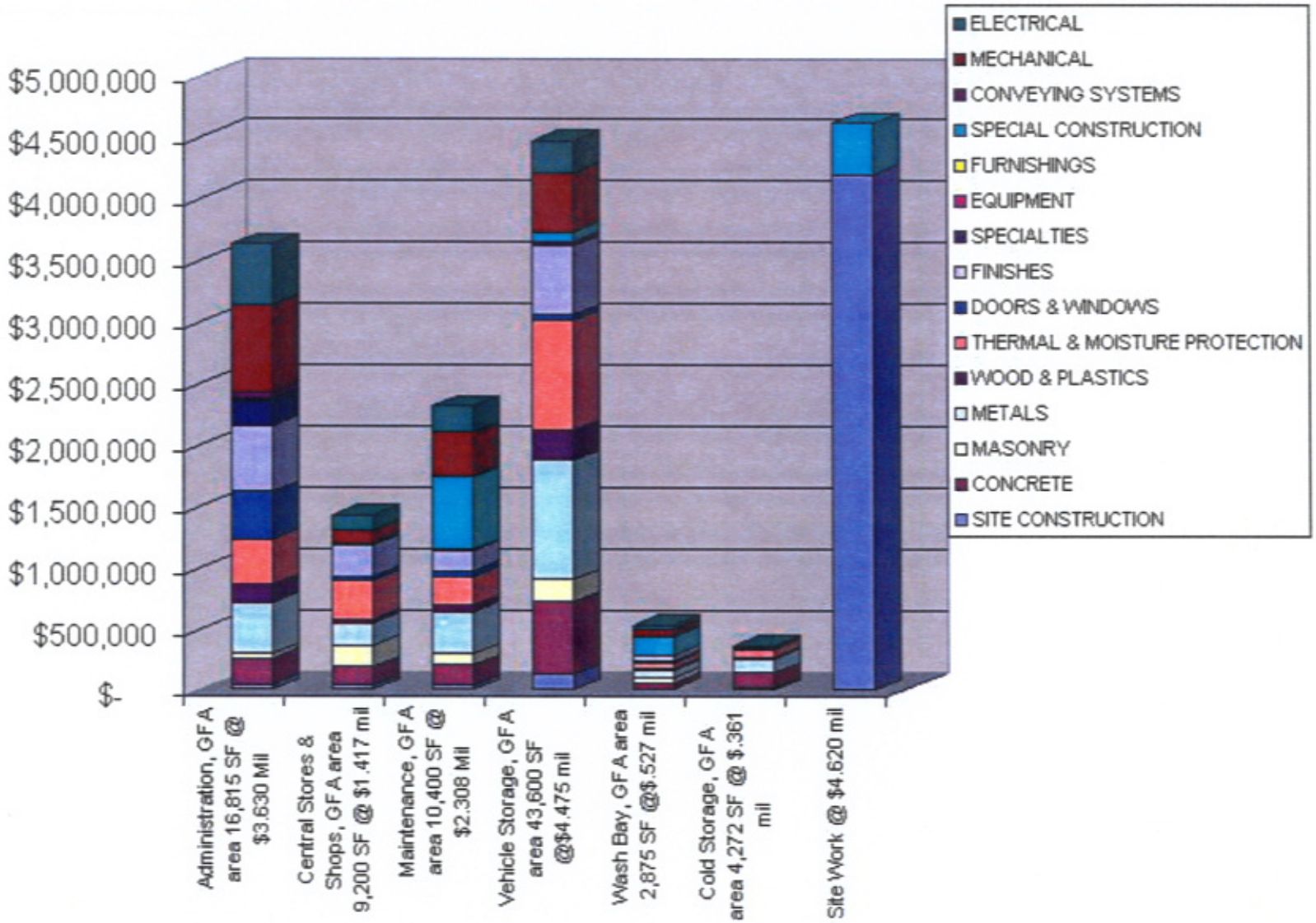


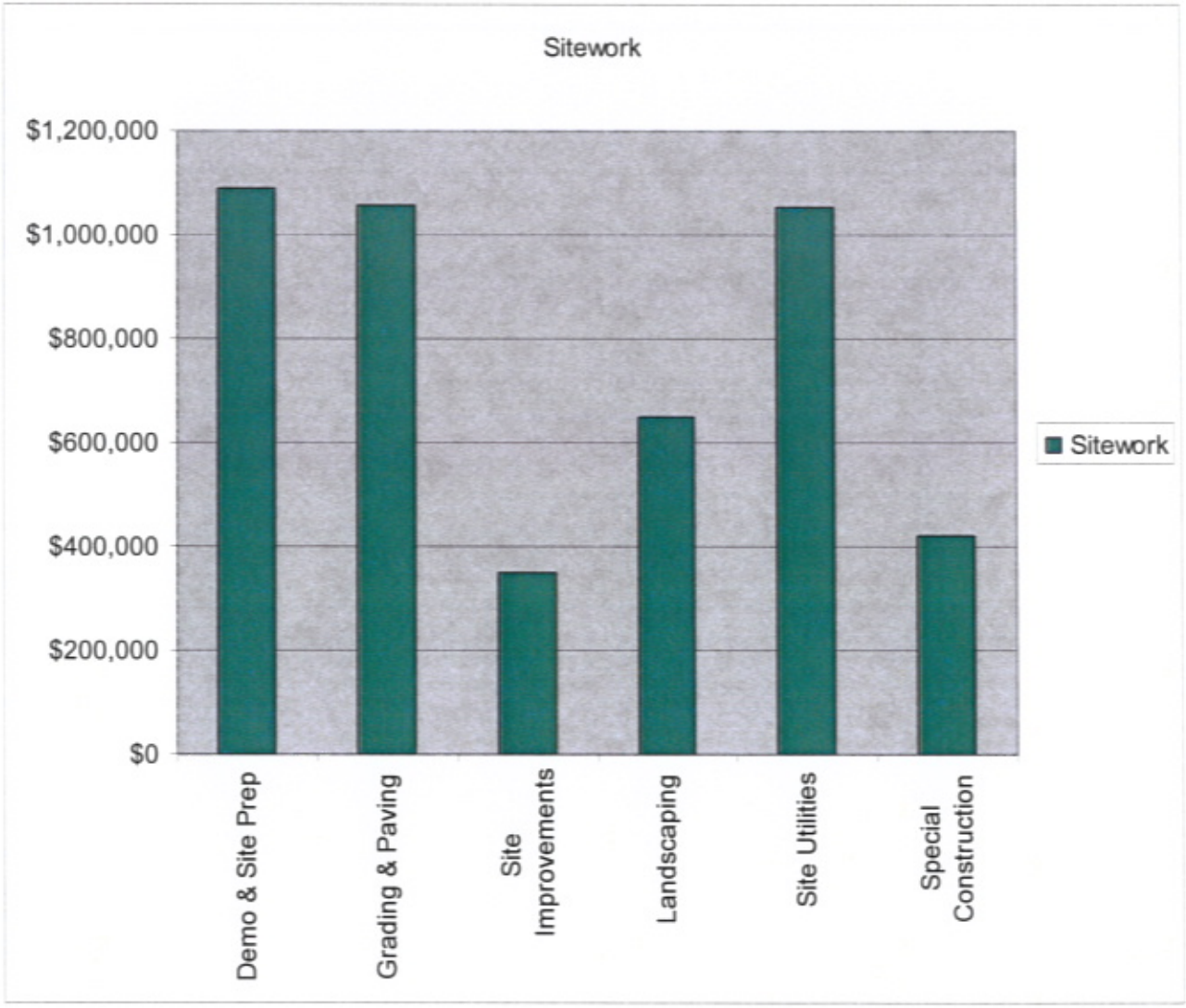
Project Costs

- Current project costs reflect work completed up to 50% construction drawings and specifications including architectural, structural, civil, landscaping, mechanical, electrical, plumbing, fire protection and industrial equipment.
- Hard costs include building construction, site work, demolition, industrial equipment including fuel island, vehicle wash system and salt and sand shed, abatement, construction escalation, and FFE.
- Soft costs include A/E fees, legal fees, printing, project management, and a phasing allowance
- Contingencies include both construction and project which are percentages of the hard and soft costs.

Project Cost

HARDCOSTS	
Building, Site & Contingency 2Q2007$	$20,700,000
Salt/Sand Shed 2Q2007$	$400,000
Hazmat	$200,000
Escalation to 3Q2007 Bid	$750,000
FFE & Communications	$290,000
SOFTCOSTS	
Professional Services: A/E Commissioning, Legal, etc	$3,020,000
Lexington Project Management	$140,000
Phasing Allowance	$200,000
CONTINGENCIES	
Construction	$1,100,000
Project	$670,000
PROJECT COST	**$27,470,000**


$5,000,000
$4,500,000
$4,000,000
$3,500,000
$3,000,000
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$-
ELECTRICAL
MECHANICAL
CONVEYING SYSTEMS
SPECIAL CONSTRUCTION
FURNISHINGS
EQUIPMENT
SPECIALTIES
FINISHES
DOORS & WINDOWS
THERMAL & MOISTURE PROTECTION
WOOD & PLASTICS
METALS
MASONRY
CONCRETE
SITE CONSTRUCTION
Administration, GFA area 16,815 SF @ $3.630 Mil
Central Stores & Shops, GFA area 9,200 SF @ $1.417 mil
Maintenance, GFA area 10,400 SF @ $2.308 Mil
Vehicle Storage, GFA area 43,600 SF @$4.475 mil
Wash Bay, GFA area 2,875 SF @$.527 mil
Cold Storage, GFA area 4,272 SF @ $.361 mil
Site Work @ $4.620 mil


Sitework
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
Demo & Site Prep
Grading & Paving
Site Improvements
Landscaping
Site Utilities
Special Construction
Sitework

Transition Plan

- Possible Uses at Minuteman Regional High School
  - Utilize 2 or more mechanical bays for fleet maintenance
  - Use of rear parking lot for DPW Operations: including Highway, Public Grounds, Water/Sewer and Operations Staff
  - Renting both construction trailers for staff and vehicle storage covering for vehicles/equipment
  - Possible inventory storage available
- Remaining Transition Plan
  - Forestry division relocated to cemetery building
  - Seasonal storage sheds and trailers relocated to compost facility
  - Possible sharing of sand & salt site with Mass Highway at Forbes Rd.
  - Possible use of former animal shelter for storage and office space
  - Land behind cemetery can be used for overflow

To see the latest information on the DPW project please go to the

DPW website at http://ci.lexington.ma.us/dpw/dpw.htm